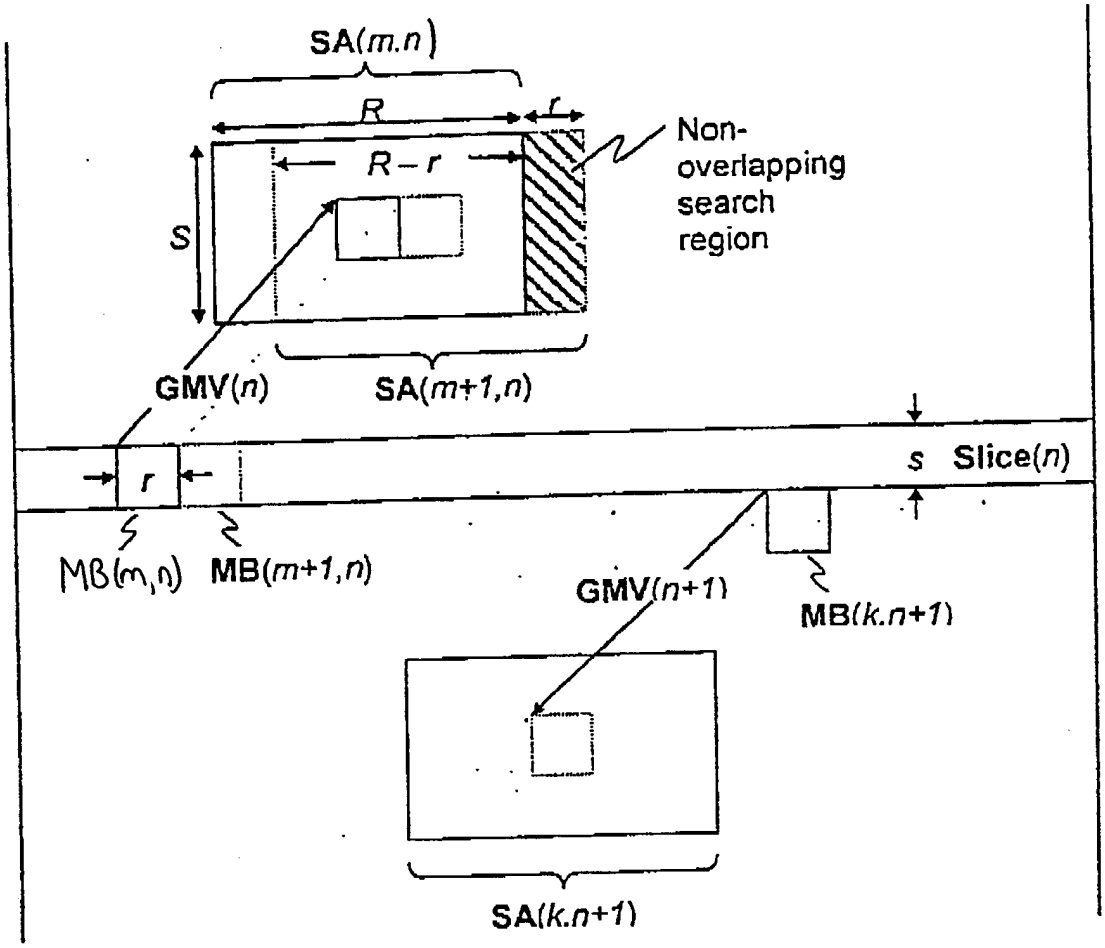
SA(m.n)
R
r
R – r
S
Non-overlapping search region
GMV(n)
SA(m+1,n)
s
Slice(n)
r
MB(m,n)
MB(m+1,n)
GMV(n+1)
MB(k.n+1)
SA(k.n+1)

FIGURE 1

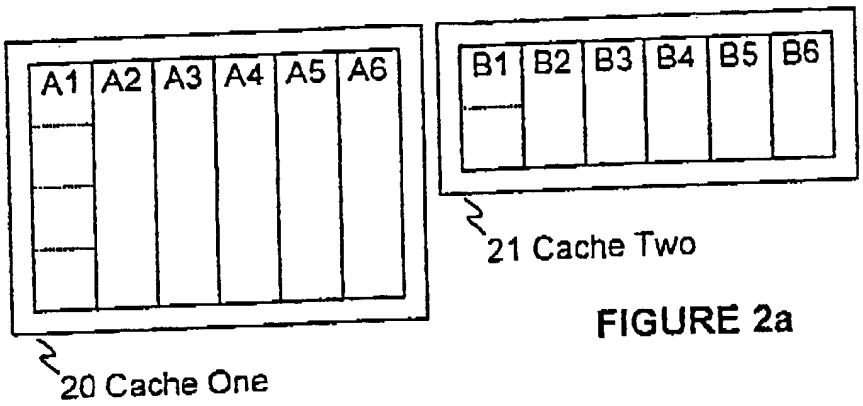

FIGURE 2a

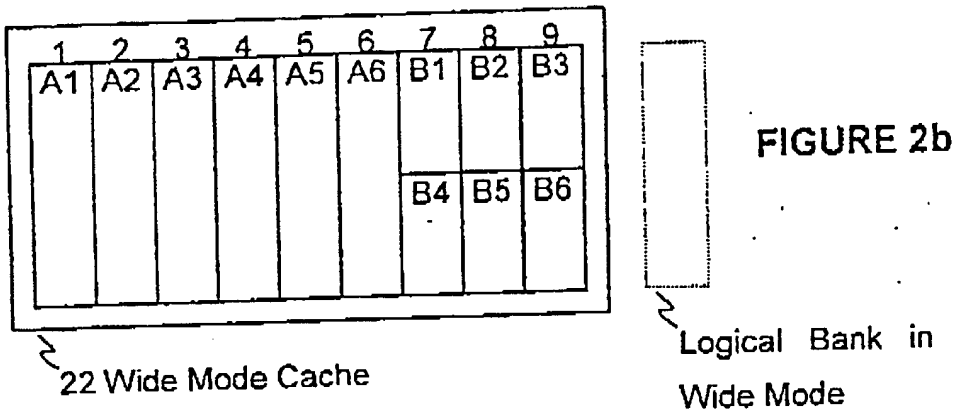

FIGURE 2b

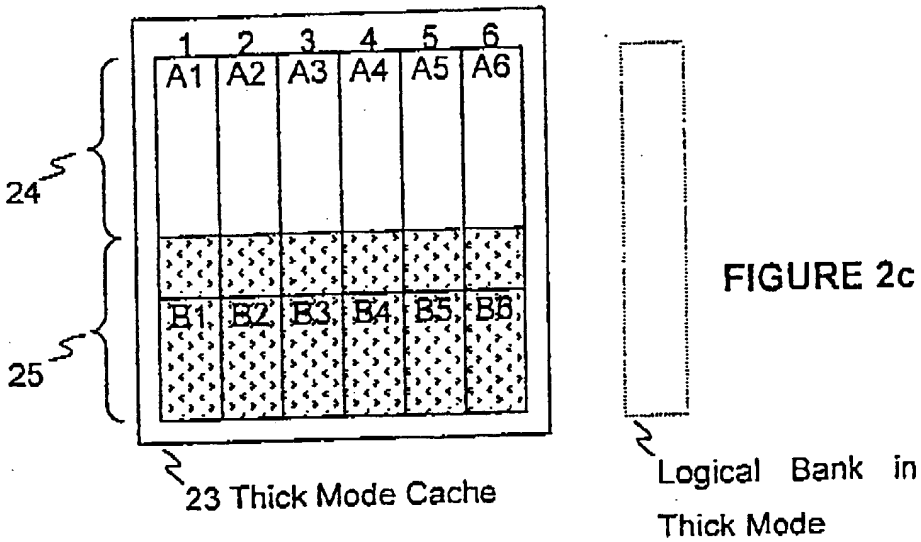

FIGURE 2c

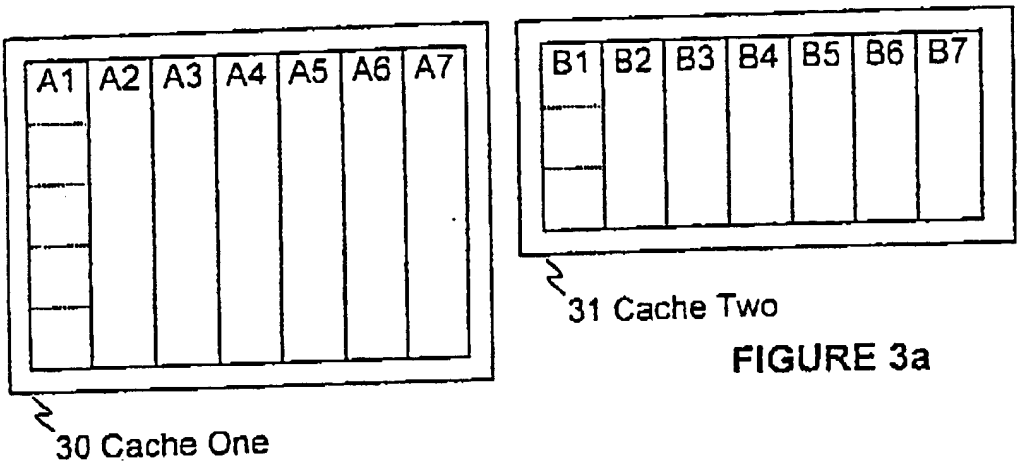

FIGURE 3a

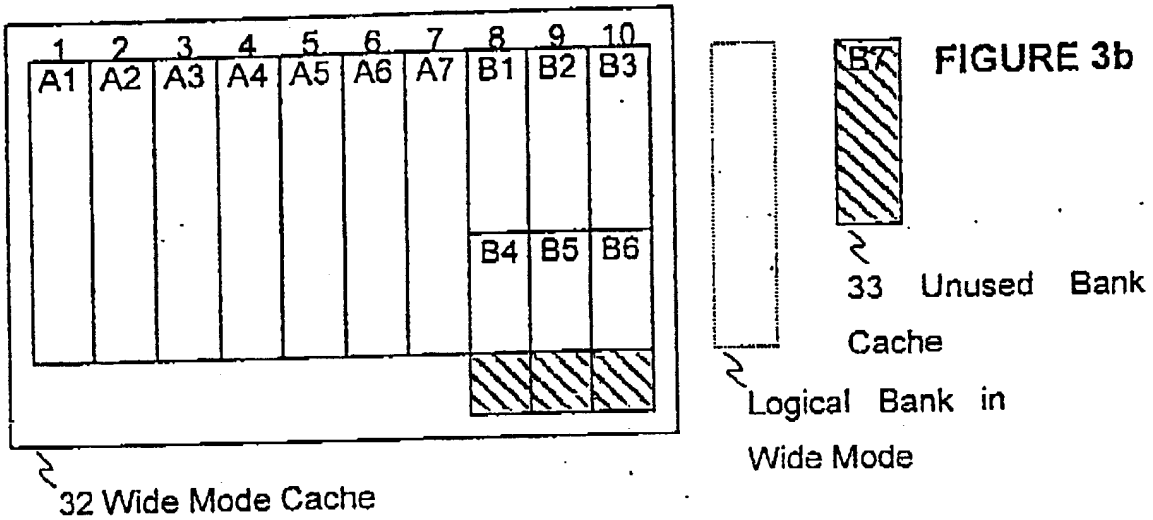

FIGURE 3b

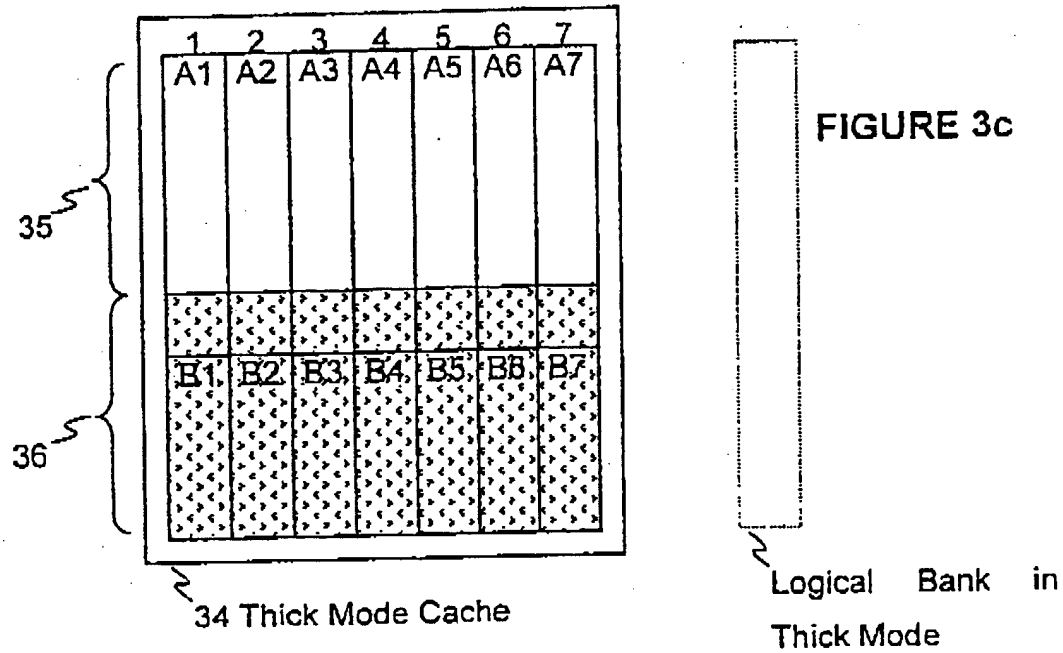

FIGURE 3c

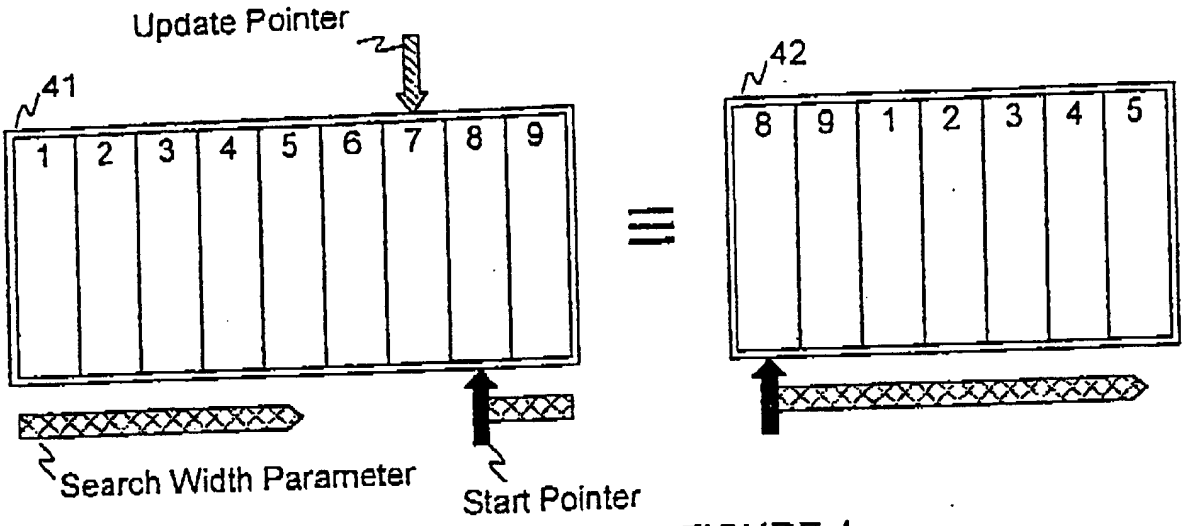

FIGURE 4a

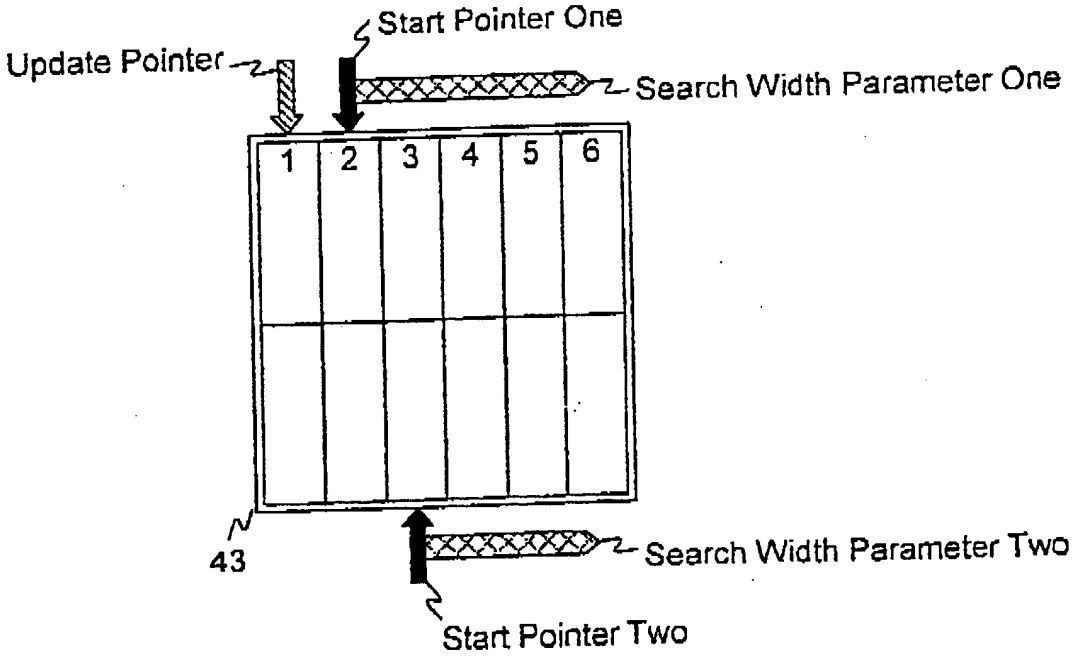

FIGURE 4b

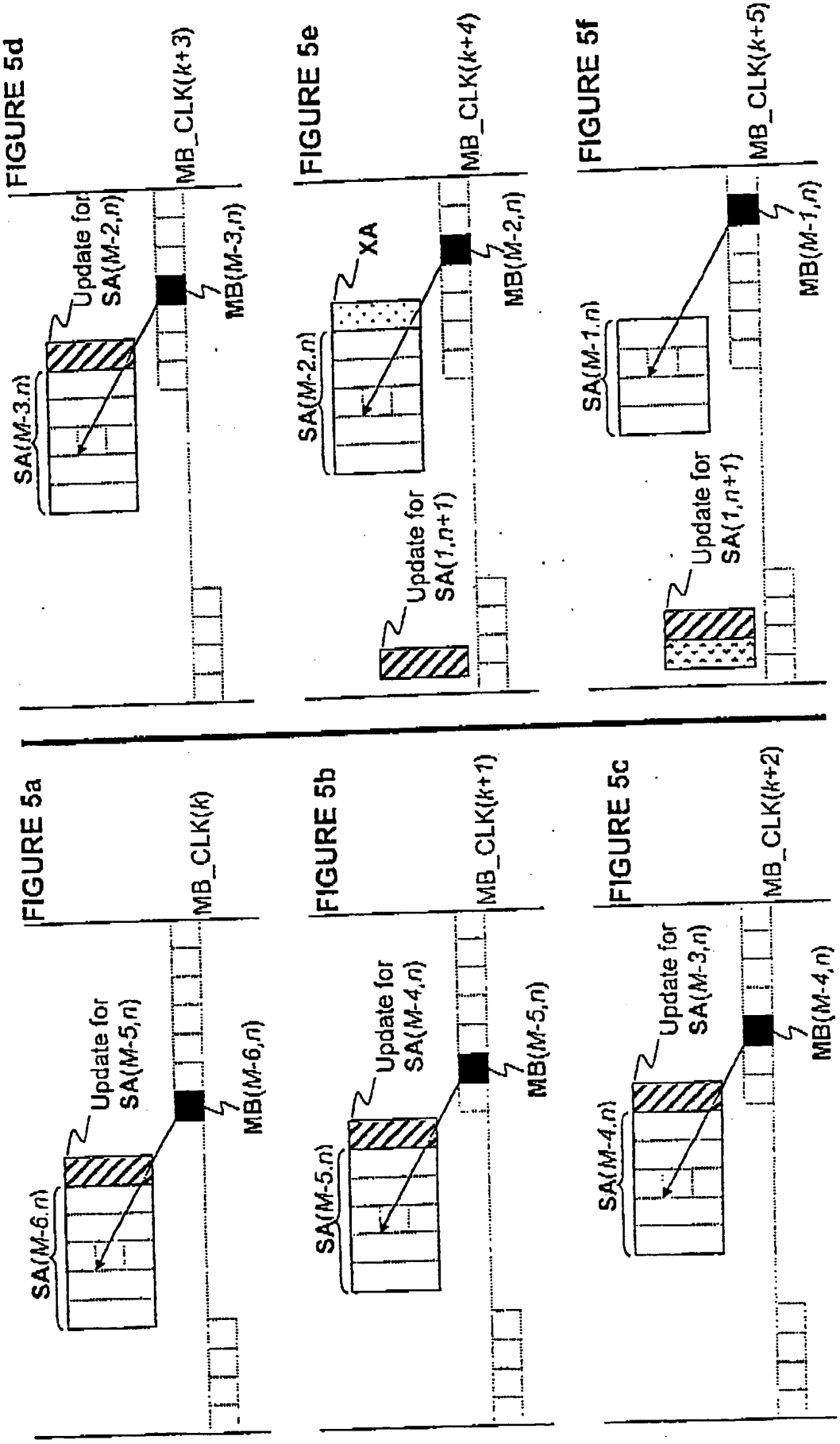
FIGURE 5a
MB_CLK(k)
Update for SA(M-5,n)
MB(M-6,n)
SA(M-6,n)
FIGURE 5b
MB_CLK(k+1)
Update for SA(M-4,n)
MB(M-5,n)
SA(M-5,n)
FIGURE 5c
MB_CLK(k+2)
Update for SA(M-3,n)
MB(M-4,n)
SA(M-4,n)
FIGURE 5d
MB_CLK(k+3)
Update for SA(M-2,n)
MB(M-3,n)
SA(M-3,n)
FIGURE 5e
MB_CLK(k+4)
XA
MB(M-2,n)
SA(M-2,n)
Update for SA(1,n+1)
FIGURE 5f
MB_CLK(k+5)
MB(M-1,n)
SA(M-1,n)
Update for SA(1,n+1)

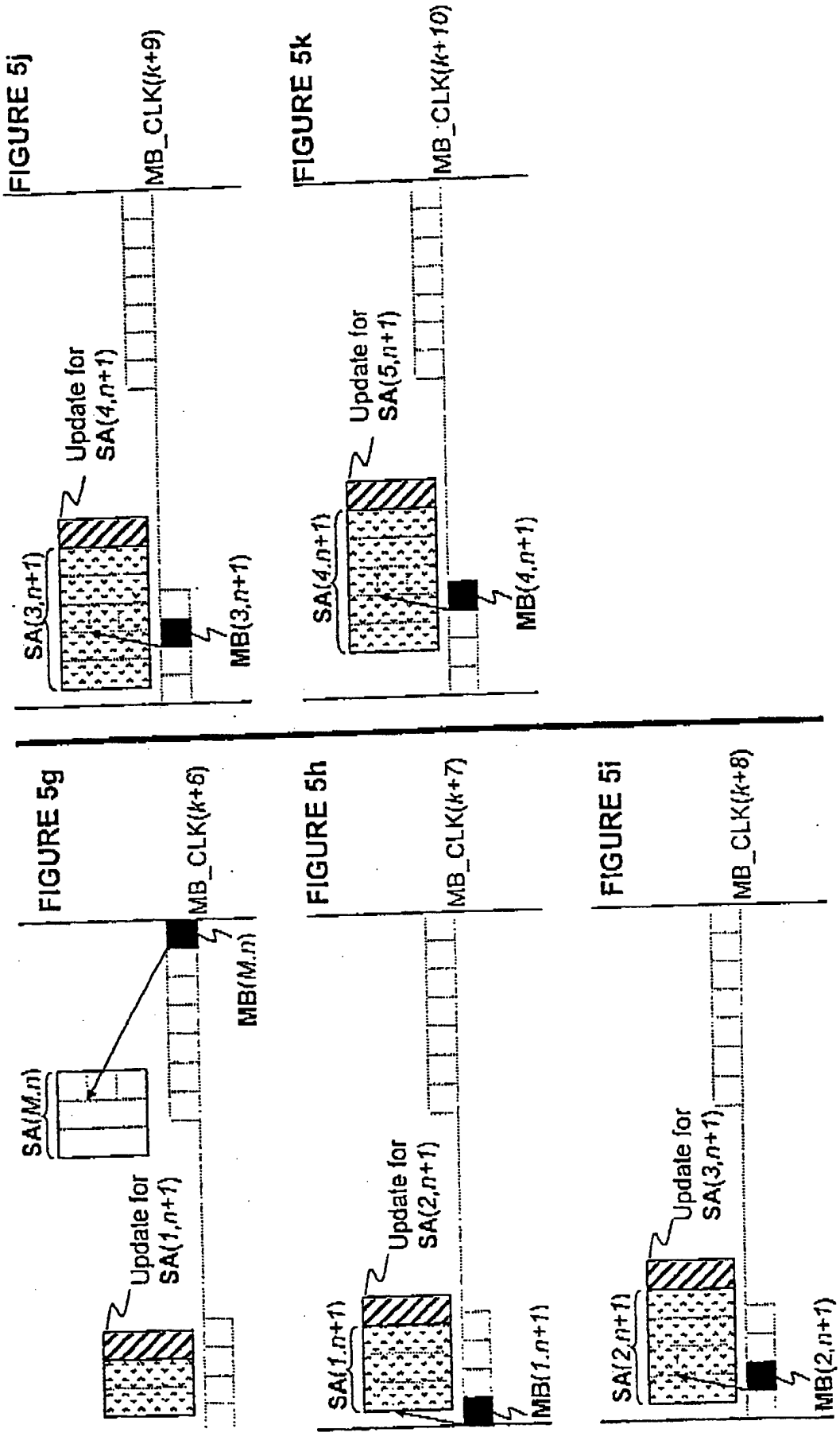
FIGURE 5j
MB_CLK(k+9)
Update for SA(4,n+1)
SA(3,n+1)
MB(3,n+1)
FIGURE 5k
MB_CLK(k+10)
Update for SA(5,n+1)
SA(4,n+1)
MB(4,n+1)
FIGURE 5g
MB_CLK(k+6)
SA(M,n)
Update for SA(1,n+1)
MB(M,n)
FIGURE 5h
MB_CLK(k+7)
Update for SA(2,n+1)
SA(1,n+1)
MB(1,n+1)
FIGURE 5i
MB_CLK(k+8)
Update for SA(3,n+1)
SA(2,n+1)
MB(2,n+1)

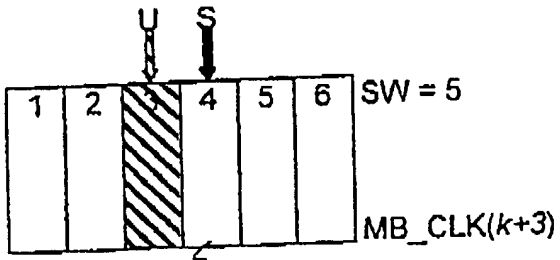

FIGURE 6a

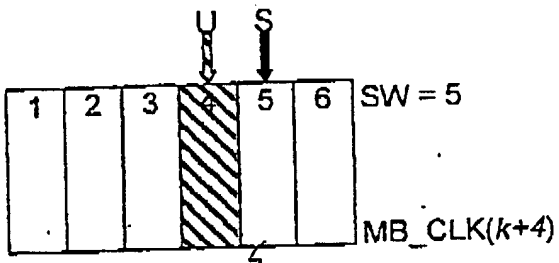

FIGURE 6b

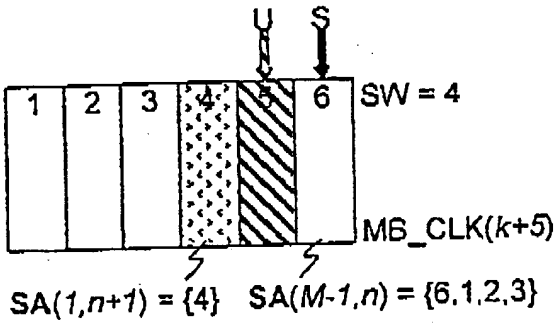

FIGURE 6c

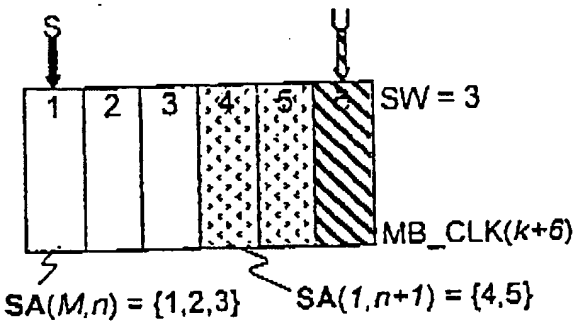

FIGURE 6d

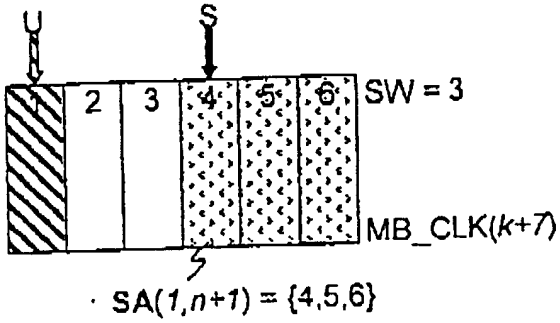

FIGURE 6

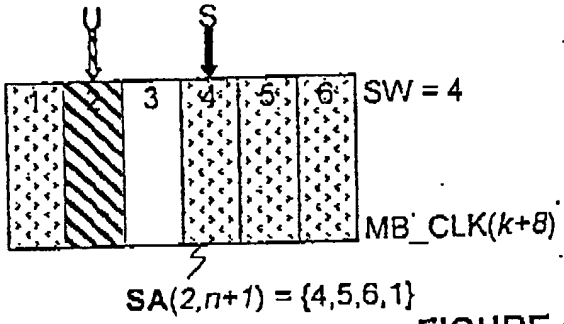

FIGURE 6f

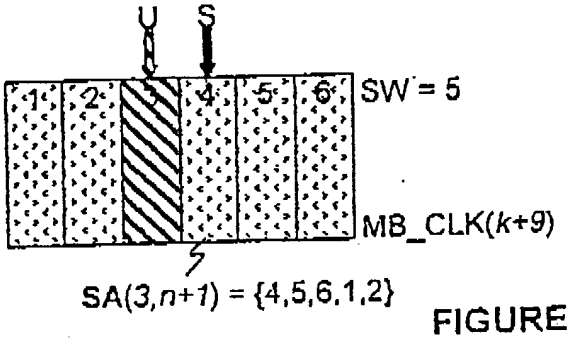

FIGURE 6g

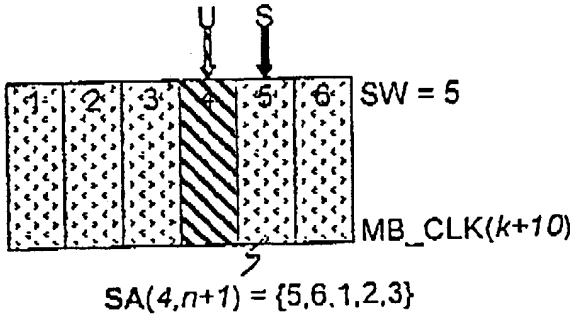

FIGURE 6h

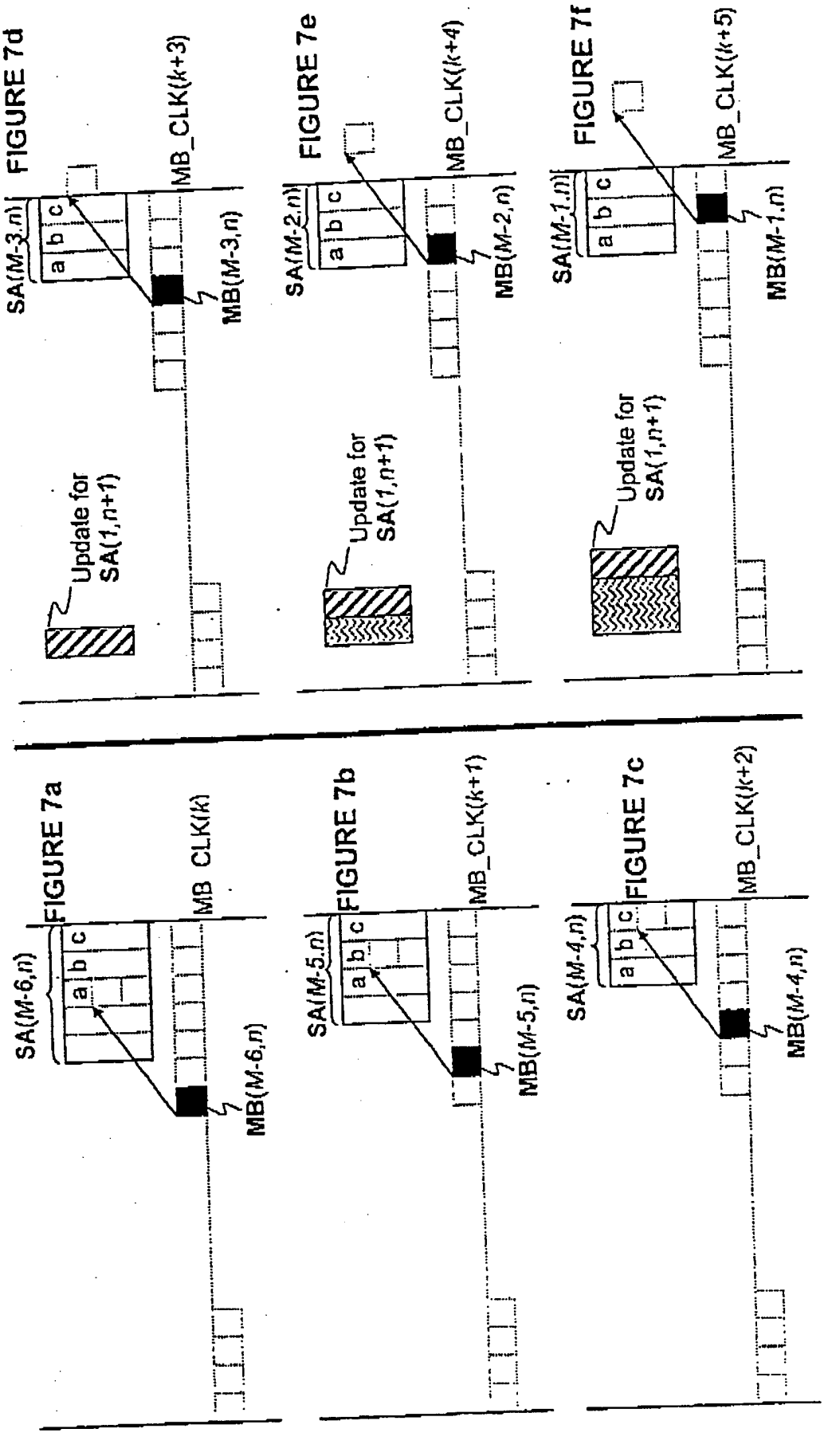
FIGURE 7d
SA(M-3,n)
a
b
c
MB_CLK(k+3)
MB(M-3,n)
Update for SA(1,n+1)
FIGURE 7e
SA(M-2,n)
a
b
c
MB_CLK(k+4)
MB(M-2,n)
Update for SA(1,n+1)
FIGURE 7f
SA(M-1,n)
a
b
c
MB_CLK(k+5)
MB(M-1,n)
Update for SA(1,n+1)
FIGURE 7a
SA(M-6,n)
a
b
c
MB CLK(k)
MB(M-6,n)
FIGURE 7b
SA(M-5,n)
a
b
c
MB_CLK(k+1)
MB(M-5,n)
FIGURE 7c
SA(M-4,n)
a
b
c
MB_CLK(k+2)
MB(M-4,n)

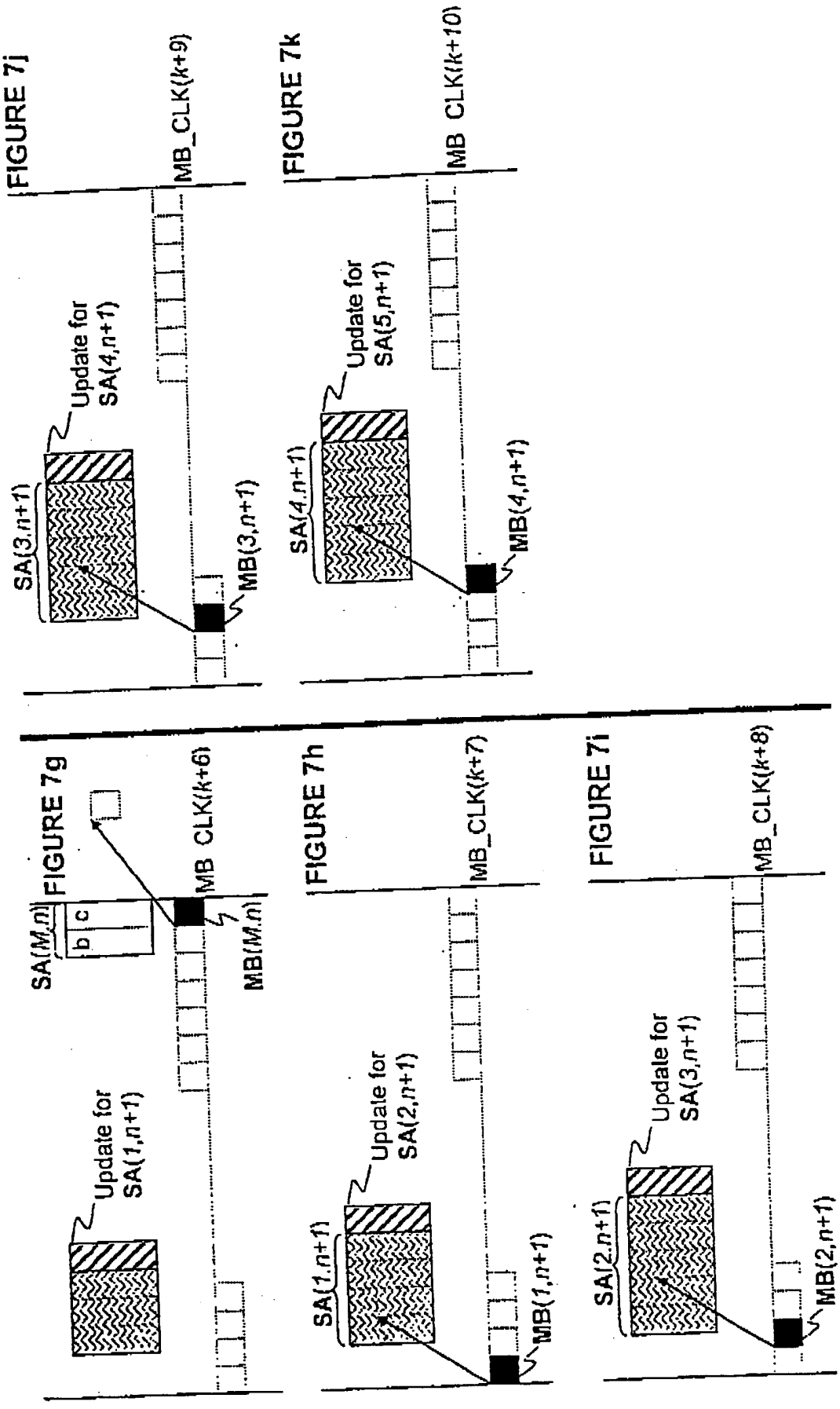
FIGURE 7j
MB_CLK(k+9)
Update for SA(4,n+1)
SA(3,n+1)
MB(3,n+1)
FIGURE 7k
MB CLK(k+10)
Update for SA(5,n+1)
SA(4,n+1)
MB(4,n+1)
FIGURE 7g
SA(M,n)
b
c
MB CLK(k+6)
MB(M,n)
Update for SA(1,n+1)
FIGURE 7h
MB_CLK(k+7)
Update for SA(2,n+1)
SA(1,n+1)
MB(1,n+1)
FIGURE 7i
MB_CLK(k+8)
Update for SA(3,n+1)
SA(2,n+1)
MB(2,n+1)

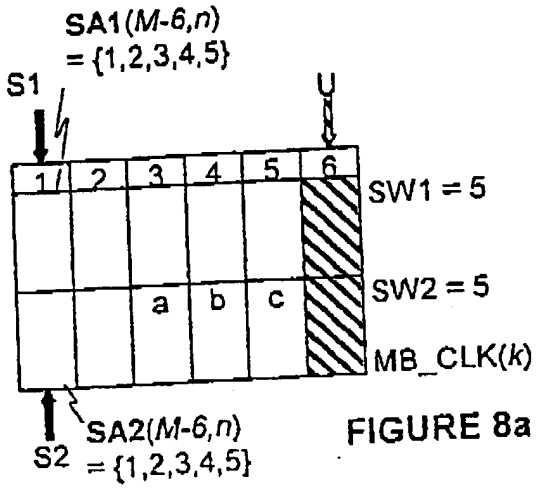

FIGURE 8a

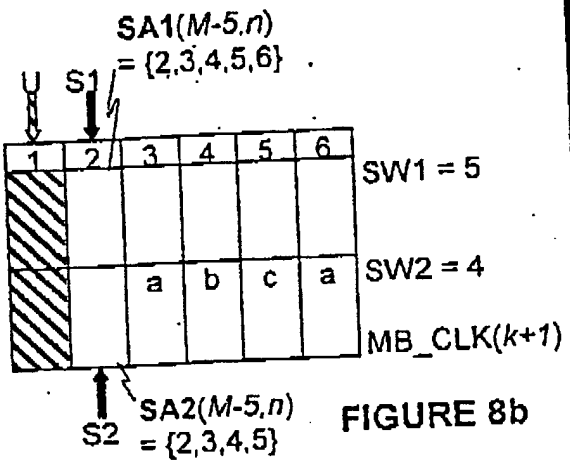

FIGURE 8b

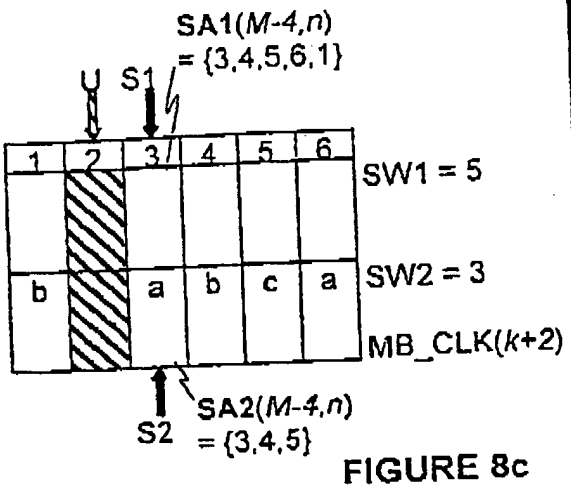

FIGURE 8c

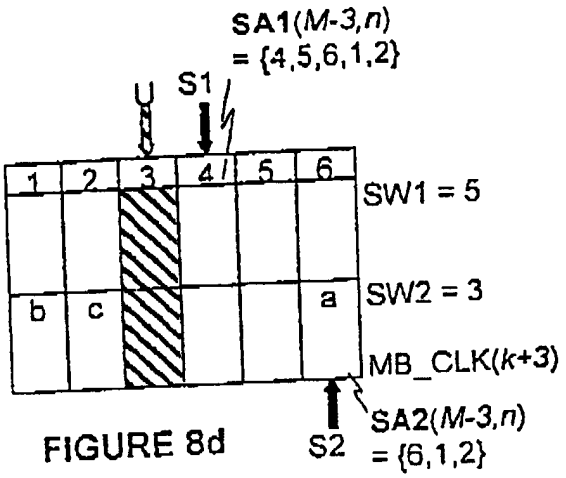

FIGURE 8d

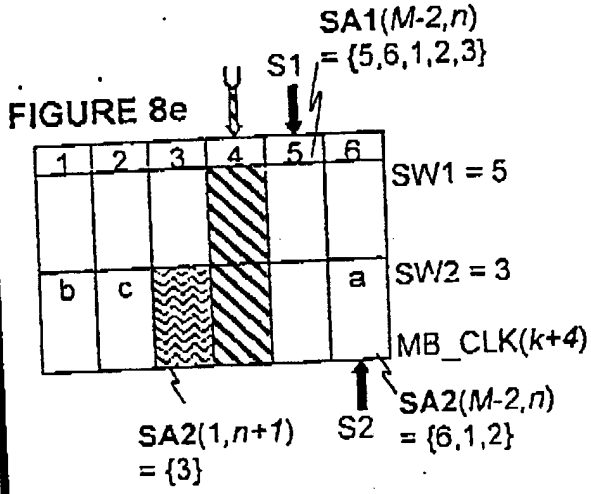

FIGURE 8e

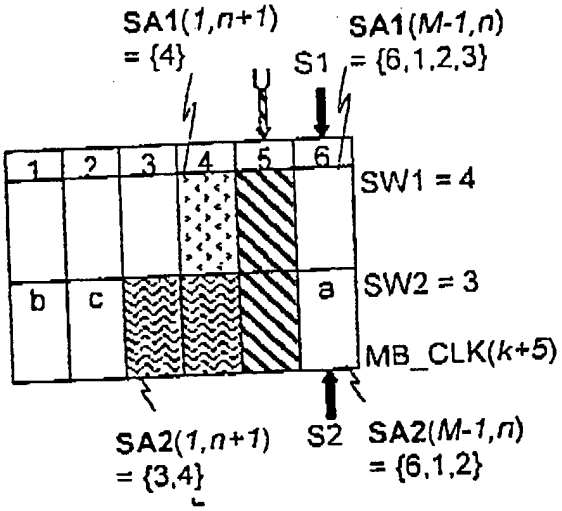

FIGURE 8f

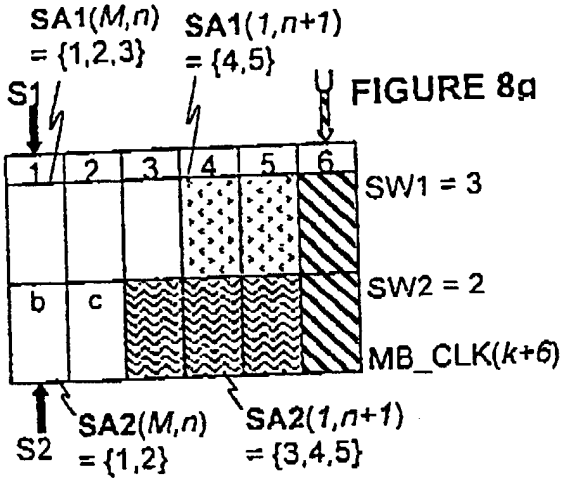

FIGURE 8g

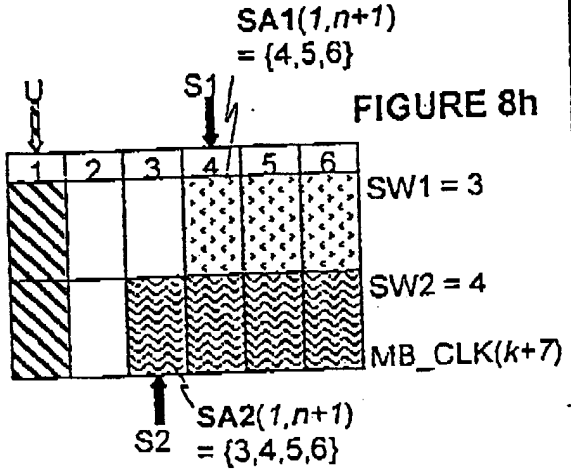

FIGURE 8h

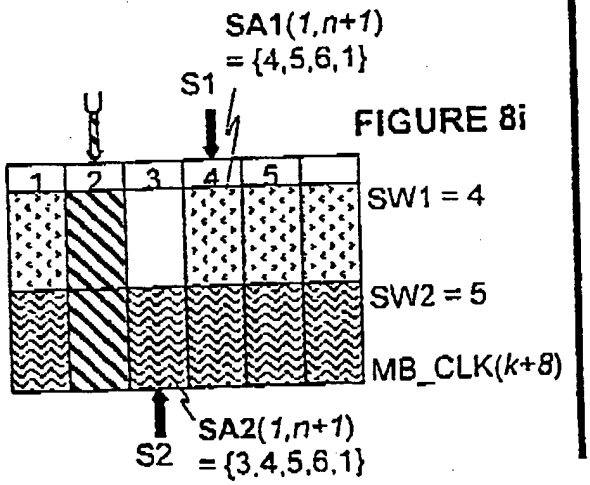

FIGURE 8i

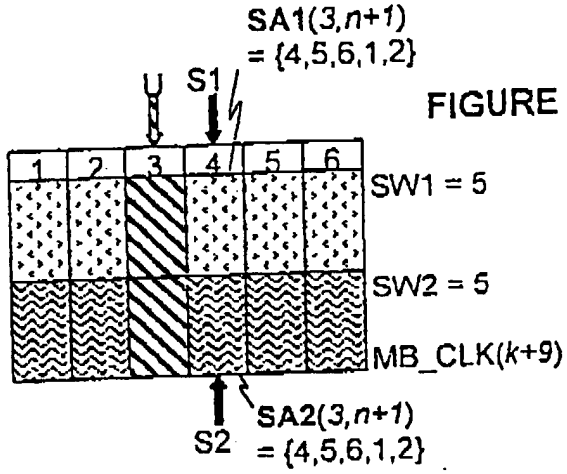

FIGURE 8i

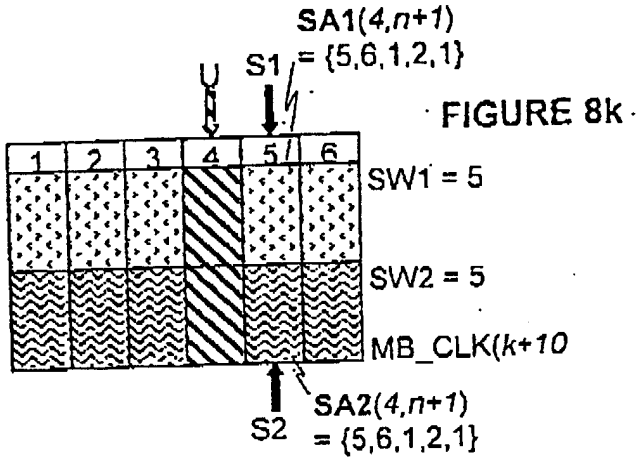

FIGURE 8k